

# **CAN DIGITAL LITERACY INCREASE SMEs PERFORMANCE? AN EVIDENCE FROM SMEs IN BANYUMAS**

**Ekaningtyas Widiastuti<sup>1\*</sup>, Retno Kurniasih<sup>2</sup>, Sri Martini<sup>3</sup>**

<sup>1</sup>Business and Economics Faculty UNSOED, widtyas@gmail.com, Indonesia

<sup>2</sup>Business and Economics Faculty UNSOED, retno.kurniasih@unsoed.ac.id, Indonesia

<sup>3</sup>Business and Economics Faculty UNSOED, sri.martini@unsoed.ac.id, Indonesia

\* retno.kurniasih@unsoed.ac.id

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## **ABSTRACT**

SME actors confirmed that their sales turnover had declined since the Covid-19 pandemic. SMEs are currently required to make rapid changes. As we all know, the current consumer tendency is to limit physical interaction and reduce activities outside the house. This can be an opportunity as well as a challenge for SMEs. The digitization process provides great opportunities for SMEs that are connected to the digital ecosystem. However, the digitalization opportunity has not been utilized optimally and evenly. Digital literacy is indispensable in improving business processes to achieve company performance. The purpose of this study was to examine the role of digital literacy of SME actors in improving the performance of SMEs in Banyumas Regency. The sampling technique used purposive sampling technique with 100 respondents. The results of the analysis found that digital literacy had a positive effect on the SMEs performance. The implication of this research is that SME actors can improve their skills in using digital media and use them optimally as a means of product marketing by participating in digital marketing training to improve their business performance.

Keywords: Digital Literacy, SME Performance

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## **1. Introduction**

The Ministry of Cooperatives and SMEs of The Republic of Indonesia stated that the development of SMEs in Indonesia is currently experiencing good development and growth. The number of SMEs in Indonesia has increased from year to year. It is undeniable that SMEs have a strategic role in improving the Indonesian economy. SMEs can expand job opportunities and employment.

The development of SMEs in Indonesia cannot be separated from the government support. Several factors that encourage SMEs to develop are the easy access in borrowing business capital, the opening of access to bank financing, and the decline in people's business loans. Those factors have encouraged the growth of micro, small and medium enterprises. Even now

literacy of SME actors in Banyumas Regency, so that strategic efforts could be made to improve heavy so that the growth of SMEs in Indonesia is increasing. In addition, the decrease in the final income tax rate has also increased the growth of SMEs. The Indonesian government issued Government Regulation Number 23 of 2018 which stipulates that the SME Final PPh (Income tax) rate will be reduced to 0.5%. This change in the reduction in the Final PPH (income tax) rate aims to ease SME actors to pay their tax obligations to the state.

The development of SMEs in Indonesia nowadays is inseparable from technological developments. SME actors are required to be adaptive in following any technological changes. This becomes an opportunity as well as a challenge for SMEs. Business actors have begun to take advantage of technological means such as using smart phones to expand their business market, and using communication applications such as WhatsApp and other social media to market their products. SME actors are forced to master various online marketing media through websites, marketplaces, and other social media that can be used as places to sell online. In fact, it has become the government's target to make SME actors take advantage of the digital world, such as e-commerce, to sell and develop their business. Quoted from [www.cnnindonesia.com](http://www.cnnindonesia.com), the Ministry of Cooperatives and SMEs (*Kemenkop UKM*) is targeting 10 million Micro, Small and Medium Enterprises (SMEs) to be digitized by the end of 2020. Currently there are 9.4 million SMEs that have digitalized or “go digital”. The digitization of SMEs is considered capable of maintaining SMEs in various situations and conditions.

Furthermore, the current pandemic affects SMESs conditions. SME actors confirmed that their sales turnover had declined since the Covid-19 pandemic. SMEs are currently being forced to make rapid changes. As we know that the current consumer tendency is to limit physical interaction and reduce activities outside the house. Of course, this digitization provides greater opportunities for SMEs that are connected to the digital ecosystem. Nevertheless, the digitalization opportunity has not been utilized optimally and evenly. From approximately 64 million SME populations in Indonesia, there are only 13 percent have utilized digitalization. This proves that the level of digital literacy of Indonesian population is not evenly distributed. As a result, socialization about digital literacy is still needed.

There are a lot of researchs and literatures that discussed the effect of digital literacy on the performance of SMEs. Researchers in developed countries have done a lot of research on digital literacy. Research conducted by Ladokun and Osunwole (2013) stated that the importance of digital literacy in improving business processes. Technological literacy is also important in organizational planning, interaction and collaboration, customer service, and business administration. Likewise, the results of research by Ashrafi & Murtaza (2008) and Iansiti & Lakhani (2014) found that there was a positive relationship between digital literacy and the performance of SMEs. Consequently, SME actors must really understand the strategic role of digital literacy in improving SME performance.

Therefore, it is necessary to conduct empirical research in developing countries on the role of digital literacy on the performance of SMEs. The purpose of this study was to determine the level of digital literacy of SME actors in Banyumas Regency and to examine the role of digital

the loan interest for SMEs is only 0.26%. In addition, the capital to establish SMEs is not too SME performance.

## **2. Literature Review**

### **2.1. SMEs Performance**

Mutegi et al. (2015) defined SME performance as the work achieved by individuals and adjusted to the role or task of the individual in a company at a certain time period, which was associated with a measure of value or a certain standard of the individual company working. Performance meant a successful achievement or failure of organizational goals that have been applied.

Performance is often associated with business growth. Adamoko et al (2015) stated that business growth is the company's ability to increase the size of a company. Fatoki (2014) in his research said that business growth and how to measure it are usually defined and measured using absolute or relative, changes in sales, assets, employment, productivity, profits. In each stage of development a different set of factors are critical to the continued growth of the company and the success of SMEs. Eke and Raath (2013) mentioned that business growth is measured from three interdependent perspectives, such as financial growth, strategic growth, and structural growth. Business owners should consider all of these three strategies when planning the growth of their business.

### **2.2. Digital Literacy**

In the era of the industrial revolution 4.0 to 5.0, everything that is related to digital is a must. All aspects of life require the sophistication of digital technology in the implementation process. In several previous eras, the use of digital technology was only in big companies. Meanwhile, it is very rare for SMEs or in other words, no one uses digital technology optimally, but only uses manuals or analog machines. An understanding of digital technology and all its aspects is currently a highly crucial requirement in running a business, from big companies to SMEs. The ability to understand things related to digital technology is called Digital literacy. This is associated with the ability to understand, to know, to adapt and to use digital devices in daily activities.

The concept of digital literacy itself was first introduced by Paul Gilster, who argued that digital literacy is the ability to use technology and information from digital devices effectively and efficiently in various contexts such as academic, career and everyday life (Riel, et. al. 2012: 3). According to Gilster in (Riel, et. al. 2012), digital literacy is described as the ability to understand and use information from various formats. Gilster explained that the concept of literacy is not only about the ability to read, but reading with meaning and understanding. Digital literacy includes mastery of ideas, not only about a single keystroke.

Digital literacy is grouped into four core competencies, 1). Internet Searching is a person's ability to use the internet and to perform various activities on it. This competency includes the component of the ability to search for information on the internet using search engines, as well as perform various activities in it; 2). Hyper-textual Navigation is the skill to read and dynamically understand the hypertext environment. This competency includes components of knowledge

the study. To determine the effect between research variables used a simple linear regression a text book and browsing via the internet, knowledge of how the web works including knowledge of bandwidth, http, html, and Url, as well as the ability to understand the characteristics of web pages; 3). Content Evaluation is a person's ability to think critically and to provide an assessment of what is found online accompanied by the ability to identify the validity and completeness of information referenced by hypertext links. This competency includes a component of the ability to distinguish between display and information content, or the user's perception in understanding the appearance of a visited web page; 4). Knowledge Assembly is the ability to organize knowledge, to build a collection of information obtained from various sources with the ability to collect and to evaluate facts and opinions properly and without prejudice. The ability to use all types of media to prove the truth of information, as well as the ability to compile the sources of information obtained on the internet and in real life in which not connected to the network.

### **3. Research Methodology**

#### **3.1. Research Type and Methodology**

This research was a descriptive and quantitative research, which aimed to analyze the digital literacy of SME actors and its influence on SME performance.

#### **3.2. Location, Population, and Sample**

This research was conducted toward SMEs in Banyumas Regency. The target population in this study was SME actors. The sample in this study was determined by purposive sampling technique.

#### **3.3. Research Variable**

The variables of this research were digital literacy and SME performance.

#### **3.4. Instruments Validity and Reliability Test**

Validity is the level of accuracy of using a tool for a phenomenon, which indicates how far a measuring device measures something that it wants to measure. With a level of significance or = 0.05 with degrees of freedom ( $n - 2$ ) then if:  $r > r_{table}$ , it means that the questionnaire is considered valid, and  $r < r_{table}$ , it means that the questionnaire is considered invalid. Reliability is an index that shows how far a measuring instrument can be trusted or relied on. If a measuring device is used twice to measure the same phenomenon and the measurement results obtained are relatively consistent, then the measuring device is reliable. In other words, reliability shows the consistency of a measuring instrument in measuring the same phenomenon. To measure reliability, alpha cronbach formula is used (Arikunto, 2002)

#### **3.5. Analysis Method**

The data obtained in the validity and reliability tests were then processed and analyzed using a descriptive statistical approach to identify the characteristics of the respondents and their responses to the statement items in the questionnaire which were indicators of the variables in

about hypertext and hyperlinks and how they work, knowledge of the difference between reading analysis tool using SPSS 17.0 software. The equation model to be analyzed was as followed:

$$Y = a + b1X1 + e$$

Description:

- Y = SME Performance
- a = Constant
- X1 = Digital literacy
- b1 = Coefficient of independent variable X1
- e = Standard error

## 4. Results

### 4.1. Validity Test

Based on the validity test of the digital literacy instrument and the performance of SMEs, it showed that all items were said to be valid, because the value of  $r_{count} > r_{table}$  (0.1966), so the instrument could be used in research.

### 4.2. Instrument Reliability Test

Table 1. Instrument Reliability Test Results

Variables	<i>Alpha-cronbach Value</i>	<i>Alpha-cronbach Minimal</i>	Description
Digital Literacy	0,954	0,60	Reliable
SMEs Performance	0,955	0,60	Reliable

Based on the output results, it was known that the Alpha-Cronbach value of each variable was  $> 0.60$ . From these results, it could be concluded that all research instruments were reliable and could be used in this research.

### 4.3. Descriptive Statistic

#### 4.3.1. Digital Literacy Variable

The digital literacy variable produced 100 respondents as the total data, obtaining an average (mean) was 3.91, a standard deviation was 0.767 with the highest value was 5 and the lowest value was 2. Furthermore, the data were presented in the frequency distribution table (Table 2) which presented the frequency and the percentage of each class. The frequency distribution data for digital literacy variables were as followed:

Table 2. Frequency Distribution of Literacy Digital Variable

Score	Frequency	Percentage (%)
2	6	6,0
3	16	16,0
4	59	59,0
5	19	19,0
Total	100	100

value was 8. Furthermore, the data were presented in the frequency distribution table (Table 5). (SDi). The Mi and SDi values were as followed:

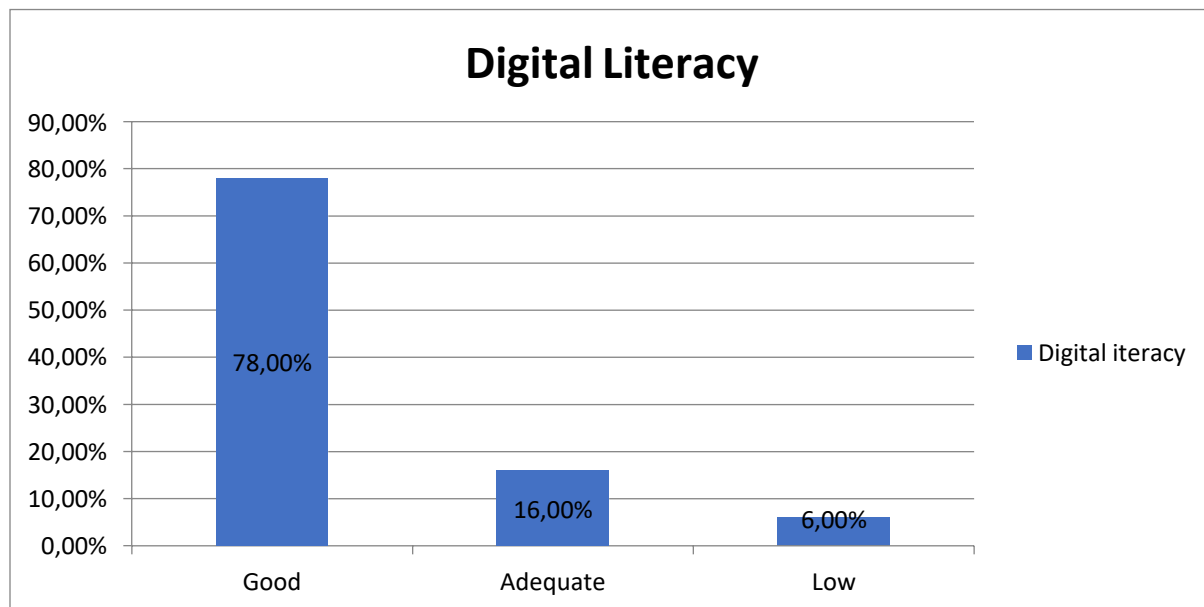
$$Mi = \frac{1}{2}(5 + 1) = 6$$

$$SDi = \frac{1}{6}(5 - 1) = 0,67$$

After obtaining the Mid and SDi scores, the categorization of scores on the digital literacy variable was as followed:

**Table 3. Score Categories of Digital Literacy Variable**

Score Categorization	Total	Percentage (%)	Category
$X > 3,99$	<b>78</b>	<b>78</b>	<b>Good</b>
$2,01 < X \leq 3,99$	<b>16</b>	<b>16</b>	<b>Adequate</b>
$X \leq 2,01$	<b>6</b>	<b>6</b>	<b>Low</b>
<b>Total of Percentage</b>	<b>100</b>	<b>100,0</b>	



**Figure 1. Digital Literacy Level Category Chart**

From this categorization, it was concluded that the level of digital literacy was in the Good category.

#### **4.3.2. SME Performance Variables**

The SME performance variable produced 24 respondents as the total data, obtaining an average (mean) was 21.00, a standard deviation was 3.923 with the highest value was 24 and the lowest

Next, the scores were categorized with the ideal mean (Mi) and the ideal standard deviation. The number of classes was 6 with a class length was 3. The frequency distribution data for the SME performance variables were as followed:

**Table 5. SMSE Performance Variable Frequency Distribution**

Score	Frequency	Percentage (%)
2	3	6,0
3	10	16,0
4	54	59,0
5	33	19,0
Total	100	100

Next, the scores were categorized with the ideal mean (Mi) and the ideal standard deviation (SDi). The Mi and SDi values were as followed:

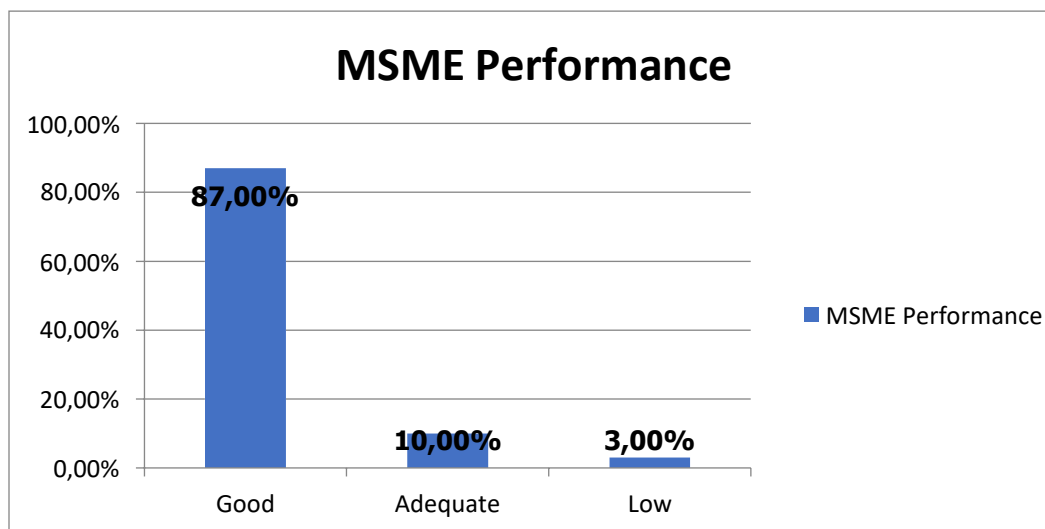
$$Mi = \frac{1}{2}(5 + 1) = 6$$

$$SDi = \frac{1}{6}(5 - 1) = 0,67$$

After obtaining the Mid and SDi scores, the categorization of scores on the SME performance variable was as followed:

**Table 6. SMSE Performance Variable Score Category**

Score Categorization	Total	Percentage (%)	Category
$X > 3,99$	87	87,0	Good
$2,01 < X \leq 3,99$	10	10,0	Adequate
$X \leq 2,01$	3	3,0	Low
Total of Percentage	100	100,0	



**Figure 2. SME Performance Level Category Chart**

Based on this categorization, it was concluded that the performance level of SMEs was in the adequate category.

#### **4.3.3 Coefficient of Determination Test**

Based on the Coefficient of Determination Test in the Summary b Model Table, it was known that the value of Adj. R Square was 0.219, in other words, the Digital Literacy variable explained the SME Performance variable by 21.9% and the rest was influenced by other variables not examined in this study.

#### **4.3.4. T Test**

**Table 7. T-Test Analysis Results (Partial Test)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	29.478	4.837		6.095	.000
	Digital Literacy	.655	.122	.477	5.370	.000

Dependent Variable: SME Performance

Based on the results of the analysis in table 7, it was known that the value of Sig. <0.05 (0.00 <0.05) so that it could be interpreted that the digital literacy variable had a positive effect on the SME Performance variable.

### **5. Discussion**

#### **5.1. Digital Literacy Level**

The level of digital literacy of SME actors in Banyumas Regency was quite good. This was based on the condition that when conducting research or filling out questionnaires, SME actors had received training related to digital marketing knowledge. They already had good knowledge and skills in applying what they had learned in training. Most of them had used technological means such as smart phones to expand their business market and use social media applications such as WhatsApp, Instagram and other social media to market the products they sell. Some of them also had marketplace accounts. As a result, the results of the scores categorization indicated that the digital literacy level of SME actors was good.

#### **5.2. The Effect of Digital Literacy on SME Performance**

The results of the analysis showed that digital literacy had a positive effect on financial behavior. Most SME actors in Banyumas Regency already had the knowledge of online technology. By utilizing available applications or digital (online) services, it would provide more advantages and



proved that after SME actors utilized and applied online media in their business processes, they could increase their business profits, or in other words, their business performance became higher. SME businesses were becoming more widely known and attracting more customers. Through online media, SME products were widely known and they could still survive in the current pandemic conditions. The results of the study were in line with research from Sariwulan et al (2020), which found that there is a significant and positive influence of digital literacy on the performance of SME entrepreneurs, it meant the higher the digital literacy knowledge, the higher the performance of SME entrepreneurs. The findings of Kulathunga, et al (2020), also underlined that both technological literacy had a direct and positive impact on the performance of SMEs. This showed the need to turn SMEs into digital organizations to improve their performance

## 6. Conclusion

The level of digital literacy of SME actors in Banyumas Regency was categorized as good and Digital Literacy of SME actors played a role in improving the performance of SMEs in Banyumas Regency. The implication was that SME actors could improve skills in using digital media as their product marketing, by participating in digital marketing training, and for stakeholders, government, academics, such as by holding counseling and training on digital marketing to SMEs on a regular basis, evenly and continuously to increase SME skills in optimally utilizing digital marketing in improving SME performance in Banyumas Regency.

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